CYBER SECURITY DIVISION

2013 PRINCIPAL INVESTIGATORS'

From Local to Global Awareness: A Distributed Incident Management System (DIMS)

University of Washington

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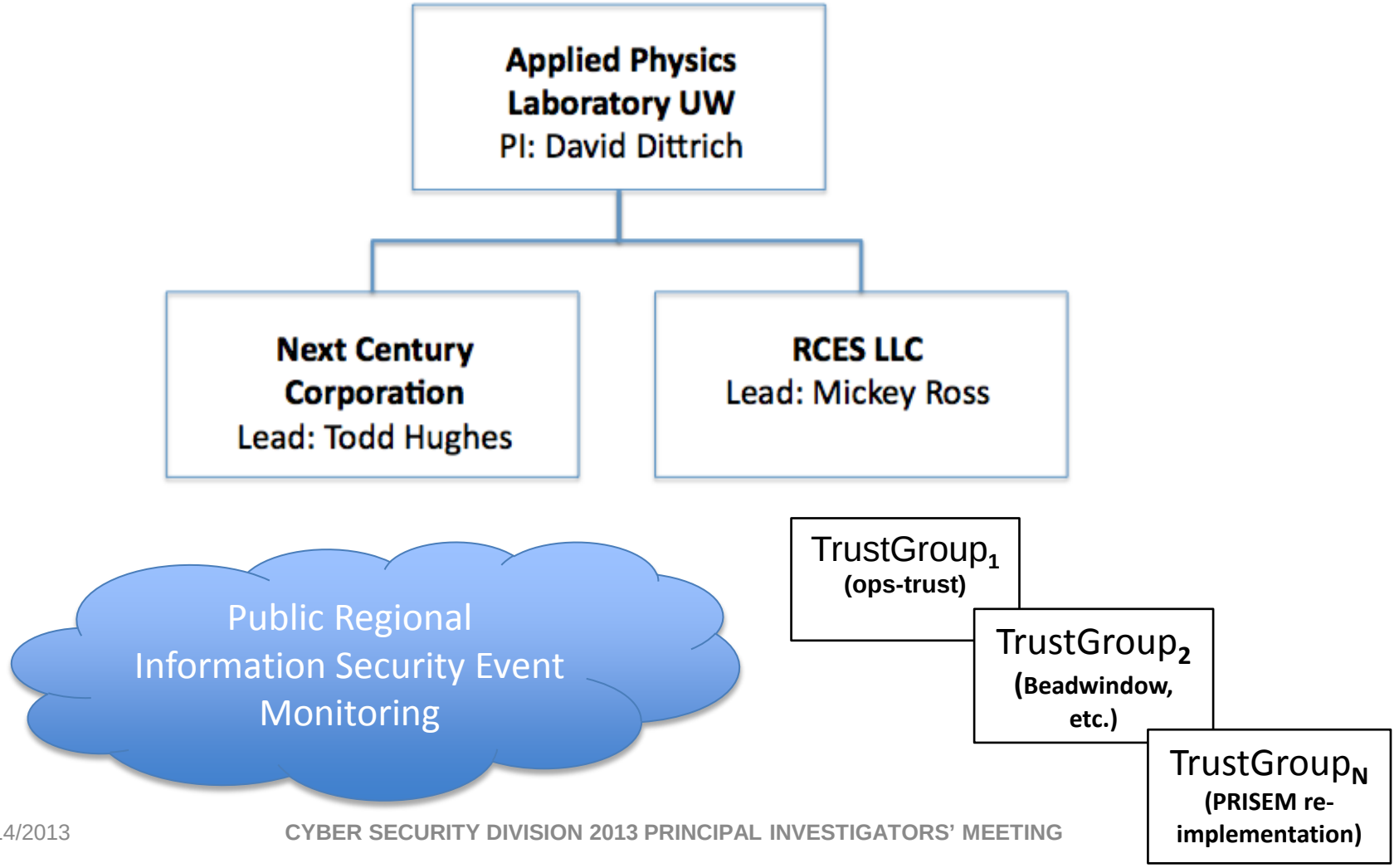
Homeland Security

Science and Technology

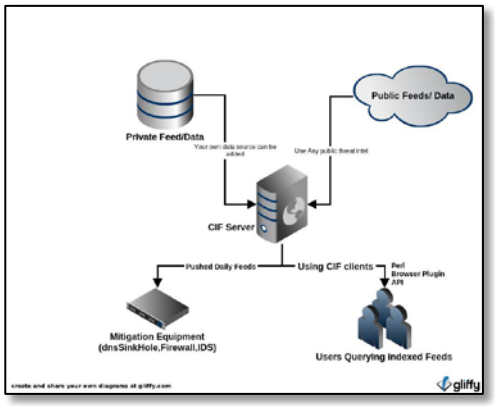
Team Profile



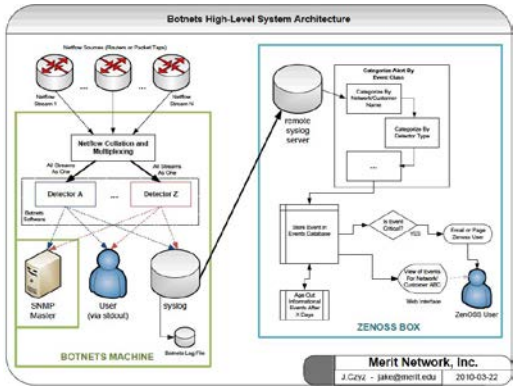
Customer Need

http://ops-trust.net

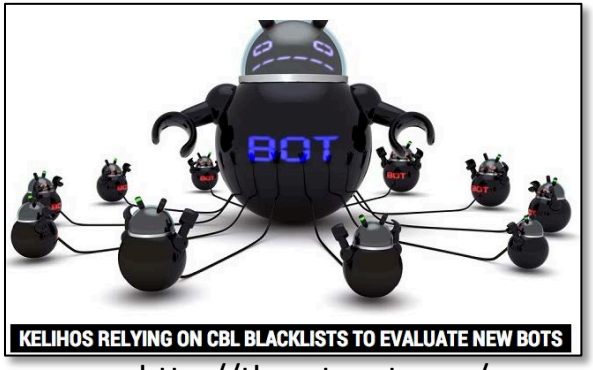
Indicators from multiple sources (e.g. Alienvault, Shadowserver, Malwarebytes, Mandiant , etc.)



http://code.google.com/p/collective-intelligence-framework/

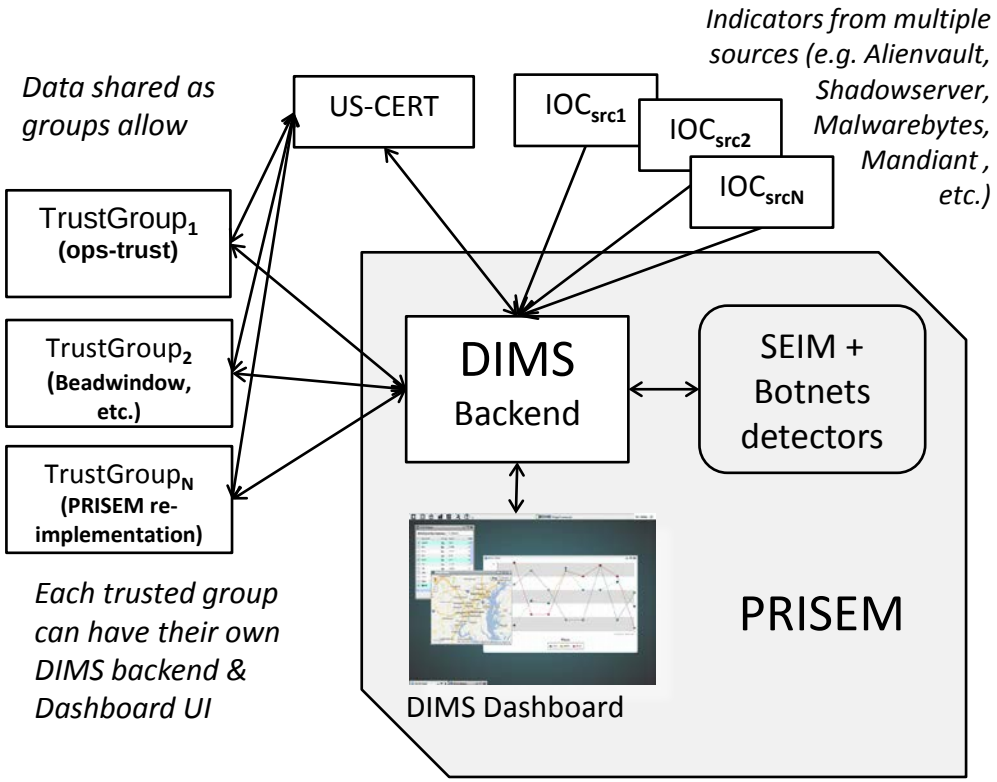


http://botnets.org



http://threatpost.com/kelihos-relying-on-cbl-blacklists-to-evalute-new-bots

Customer Need



Approach

Develop a system for collaborative response detection and mitigation mechanisms to counter target and advanced threats

- Web Application Service front end (dashboard) for data mining, analysis, reporting, and data ingest/export
- Role based access controls, account management, and data anonymization/filtering
- Integrate alerting from protective and detective systems with contextual information and cross-organizational situational awareness
- Integration with host-based forensic tools to facilitate triage, implementing "course of action" steps
- Vertical (US-CERT) and horizontal information sharing with trusted groups (e.g., ops-trust, Beadwindow, etc.)

Benefits

- Improved Performance
  - Platform for collaborative situational awareness and response, integrating Indicators of Compromise (IOCs) from multiple sources
  - Security-assessed ops-trust portal for increased collaboration across trust groups
  - Improve operator effectiveness in mitigating targeted and advanced threats
  - Provide actionable intelligence and course of action options
- Lower Cost of Ownership
  - Prototypes developed as open source for rapid innovation & diffusion
  - Use combined strength of UW, Next Century, to support technology transfer
- Better situational awareness (at scale)
  - Integrated approach to monitoring, analysis, visualization, and data sharing
  - Enhance existing Security Event Information Management (SEIM) systems with vender-neutral dashboard

Contact Information

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